**Earth Science Movements of the Ocean (Chapter 21 Outline)**

***AS YOU READ, RESPOND TO THE FOLLOWING:***

*Vocabulary*: **Define in your own words**

Current-

Surface current-

Coriolis Effect-

Gyre-

Gulf Stream-

Deep current-

Wave-

Wave period-

Fetch-

Refraction-

Tide-

Tidal Range-

Tidal oscillation-

Tidal current-

*Respond to the following:*

Describe how wind patterns, the rotation of Earth, and continental barriers affect surface currents in the ocean. Be specific in your response. (3 pts).

Explain how differences in the density of ocean water affect the flow of deep currents. Be specific in your response. (2 pts)

Describe the formation of waves and the factors that affect wave size in the ocean. Explain. (4 pts).

How do ocean waves interact with the coastline? Describe in detail the different interactions between ocean waves and the coastline. (4 pts)

Describe how the gravitational pull of the moon causes tides. Be specific in your response. (2 pts)

Describe how tidal oscillations affect tidal patterns. Describe in detail. (2 pts)

What is the difference between a spring tide and a neap tide? Explain. (2 pts)

***ABOUT THE READING:***

Write three things that you learned about Movements of the Ocean*:*

***Make sure to write a full sentence.***

*Example: I learned that the gravitational pull of the moon causes tides; the side of the Earth closer to the Moon experiences "high tides".*

*1.*

*2.*

*3.*

***Assigned work****: pg. 536, #s 17, 20, 22-24, 26-27*